5/19

DART AEROSPACE LTD	Work Order:	23058
Description: Ø3.250 Support	**Part Number:**	D2940-1
Dwg: D2940 Rev. A1	**Qty:**	20 ~~10~~
		Page 1 of 1

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller. Blank size makes (2) D2940-1 **Dwg not required**	KJ	05.04.13	10
2	PG	Issue P/O: 2007889 Description: D6104-007 Material: 17-4 PH SS (AMS 5643 OR AISI 630) as per Dwg D6104 **Material release note required.**	N	050413	10
3	RG	Receive and Inspect for raw material dimensions. **Ensure material release note is attached.**	CL	05/04/21	10
4	MS	Turn blank for Haas as per Folio FA079	JG	05/05/18	10
5	QC1	Inspect all dimensions as per Dwg D2940	JG	05/05/19	10
6	MV	Machine as per Folio FA079	JL/EP	05/05/29	10
7	MV	Tumble & Deburr	JL/EP	05/05/29	10
8	QC1	Inspect all dimensions to inspection sheet as per Dwg D2940	JL/EP	05/05/29	10.
9	QC8	Inspect dimensions for second check		05.5	10
10	FP	Powder Coat White (4.3.5.2) per QSI 005 4.3	ml	05 06 02	10
11	QC3	Inspect Powder Coat	ml	05-06-03	20
12	ST	Identify and stock	ml	05-06-03	20
13	AC	Cost / part 149.46	SAC	05-06-09	20
14	DC	Close W/O 149.94 Inspect Level 21	KJ	05.06.08	20

RF 03-06-09

Rev	Date	Change	Revised By	Approved
A	01.01.08	Preliminary Issue	EC	
B	01.08.15	Removed Heat treating	EC	
C	02.11.26	Reformat; Added P/O	KJ / RF RF	

RELEASED
02/11/29 RF

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
05/05/24	#6	One part - holes off Center (X) by ~~0.015~~ 0.015"	[signature] partial	IT IS ACCEPTABLE FOR THIS TIME ONLY ~~DT~~ 05.05.30	[signature] 05/05/30	[signature] 05-05-30	~~DT~~ 05.05.30	[signature] 05-05-30

Part No: D2940-1 PAR #: _____ Fault Category: _____ NCR: Yes (No) DQA: [signature] Date: 05/06/08

NOTE: Date & initial all entries QA: N/C Closed: _____ Date: _____

DART AEROSPACE LTD	Work Order:	23058
Description: Ø3.250 Support	Part Number:	D2940-1
Inspection Dwg: D2940 Rev. A1		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B & record below:

				Recorded Actual Dimensions					
Dim	**Min**	**Max**	**Go/No Go Gauge**	**1**	**2**	**3**	**4**	**By**	**Date**
Lathe Section									
A	3.211	3.216		3.216	3.216	3.216	3.216		
B	4.946	4.966		4.966	4.965	4.964	4.966		
C	0.718	0.738		0.725	0.724	0.728	0.725		
D	0.090	0.110		0.110	0.103	0.104	0.105		
E	3.564	3.584		3.571	3.571	3.574	3.572		
F	0.022	0.042		0.032	0.032	0.032	0.032		
G	3.444	3.464		3.452	3.455	3.455	3.455	SG	05/05/19
H	0.112	0.132		0.116	0.120	0.118	0.114		
I	2.170	2.190		2.183	2.184	2.181	2.184		
J	4.451	4.471		4.458	4.458	4.457	4.458		
K	0.413	0.433		0.423	0.427	0.425	0.423		
L	0.913	0.933		0.927	0.925	0.926	0.925		
M									
N									
HAAS Section									
AA	0.240	0.260		R.25	R.250	R.250	R.250		
AB	0.490	0.510		R.50	R.50	R.50	R.50		
AC	0.140	0.160		0.155	0.155	0.155	0.154		
AD	3.510	3.530		3.517	3.522	3.520	3520		
AE	1.633	1.673		1.663	1.663	1.663	1.660		
AF	1.493	1.513		1.513	1.512	1.512	1.512		
AG	0.040	0.060		0.053	0.050	0.049	0.052		
AH	0.188	0.193	DT8706	~	~	~	~		
AI	0.140	0.160		0.156	0.157	0.154	0.152		
AJ	2.518	2.538		2.519	2.519	2519	2.519		
AK	0.040	0.060		0.054	0.054	0.050	0.052		
AL	0.010	0.020		0.010	0.010	0.010	0.010		
AM	0.140	0.160		0.144	0.144	0.150	0.152		
AN	0.350	0.450		0.380	0.380	0.380	0.380		
AO	0.240	0.260		R.25	R.25	R.25	R.258		
AP	0.150	0.170		0.152	0.150	0.162	0.160		
AQ	0.053	0.073		R.063	0.063	0.063	0.063		
~~AR~~	~~101.64~~	~~105.64~~	DT8698	No gauge to measure					
AS	0.257	0.262	DT8683	~	~	~	~		
AT	0.053	0.073		R.063	R.063	R.063	R.063		
AU	4.118	4.138		4.135	4.135	4.135	4.135		
AV									
AW									
Accept/Reject									

Measured by:	S.G	Audited by	
Date:	05/05/19 05/6/19	Date:	05.05.19

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF RF	

RELEASED 03.07.01 RF

DART AEROSPACE LTD	Work Order:	23058
Description: Ø3.250 Support	Part Number:	D2940-1
Inspection Dwg: D2940 Rev. A1		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B.& record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	#5	#6	#7	#8	By	Date
Lathe Section									
A	3.211	3.216		3.216	3.215	3.215	3.216	JG	05/05/19
B	4.946	4.966		4.964	4.966	4.964	4.965		
C	0.718	0.738		0.728	0.726	0.723	0.724		
D	0.090	0.110		0.103	0.104	0.109	0.104		
E	3.564	3.584		3.571	3.573	3.571	3.768		
F	0.022	0.042		0.032	0.032	0.032	0.032		
G	3.444	3.464		3.451	3.455	3.450	3.456		
H	0.112	0.132		0.118	0.121	0.118	0.117		
I	2.170	2.190		2.184	2.184	2.180	2.183		
J	4.451	4.471		4.457	4.457	4.456	4.457		
K	0.413	0.433		0.436	0.428	0.427	0.429		
L	0.913	0.933		0.929	0.930	0.929	0.929		
M									
N									
HAAS Section									
AA	0.240	0.260		0.256	0.250	0.250	0.250		
AB	0.490	0.510		0.50	0.50	0.50	0.52		
AC	0.140	0.160		0.157	0.157	0.158	0.155		
AD	3.510	3.530		3.524	3.529	3.520	3.520		
AE	1.633	1.673		1.653	1.656	1.661	1.660		
AF	1.493	1.513		1.508	1.499	1.506	1.505		
AG	0.040	0.060		0.054	0.049	0.043	0.045		
AH	0.188	0.193	DT8706	—	—	—	—		
AI	0.140	0.160		0.157	0.149	0.149	0.150		
AJ	2.518	2.538		2.528	2.528	2.528	2.528		
AK	0.040	0.060		0.044	0.045	0.045	0.043		
AL	0.010	0.020		0.010	0.010	0.010	0.010		
AM	0.140	0.160		0.154	0.150	0.153	0.150		
AN	0.350	0.450		0.380	0.380	0.380	0.380		
AO	0.240	0.260		0.250	0.250	0.250	0.250		
AP	0.150	0.170		0.156	0.157	0.154	0.153		
AQ	0.053	0.073		0.063	0.063	0.063	0.063		
AR	101.64	105.64	DT8698	NO	Gauge	to	Measure		
AS	0.257	0.262	DT8683	—	—	—	—		
AT	0.053	0.073		0.063	0.063	0.063	0.063		
AU	4.118	4.138		4.120	4.128	4.130	4.131		
AV									
AW									
Accept/Reject									

Measured by:	J. G / E.P.
Date:	05/05/19 / 05/05/25

Audited by	
Date:	05.05.19

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	

03.07.01 RF

DART AEROSPACE LTD	Work Order:	23058
Description: Ø3.250 Support	Part Number:	D2940-1
Inspection Dwg: D2940 Rev. A1		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B & record below:

				Recorded Actual Dimensions					
Dim	**Min**	**Max**	**Go/No Go Gauge**	1/9	2/10	3	4	**By**	**Date**
				Lathe Section					
A	3.211	3.216		3.215	3.216				
B	4.946	4.966		4.966	4.957				
C	0.718	0.738		0.728	0.727				
D	0.090	0.110		0.104	0.110				
E	3.564	3.584		3.575	3.574				
F	0.022	0.042		0.032	0.032			SG	05/05/19
G	3.444	3.464		3.456	3.455				
H	0.112	0.132		0.117	0.118				
I	2.170	2.190		2.181	2.182				
J	4.451	4.471		4.457	4.458				
K	0.413	0.433		0.423	0.422				
L	0.913	0.933		0.924	0.925				
M									
N									
				HAAS Section					
AA	0.240	0.260		0.256	0.250	0.250	0.252		
AB	0.490	0.510		0.50	0.50	0.50	0.50		
AC	0.140	0.160		0.155	0.152	0.150	0.152		
AD	3.510	3.530		3.527	3.529	3.528	3.528		
AE	1.633	1.673		1.664	1.664	1.664	1.662		
AF	1.493	1.513		1.501	1.506	1.501	1.507		
AG	0.040	0.060		0045	0.050	0.049	0.045		
AH	0.188	0.193	DT8706	—	—	—	—		
AI	0.140	0.160		0.150	0.151	0.150	0.149		
AJ	2.518	2.538		2.524	2.527	2.527	2.529		
AK	0.040	0.060		0.049	0.048	0.049	0.048		
AL	0.010	0.020		0.010	0010	0.010	0.010		
AM	0.140	0.160		0.150	0.148	0.151	0.152		
AN	0.350	0.450		0.400	0.400	0.380	0.380		
AO	0.240	0.260		0.250	0.250	0.250	0.250		
AP	0.150	0.170		0.157	0163	0.163	0.163		
AQ	0.053	0.073		0.063	0.063	0.063	0.063		
AR	101.64	105.64	DT8698	No gauge to measure					
AS	0.257	0.262	DT8683	—	—	—	—		
AT	0.053	0.073		0.063	0.063	0.063	0.063		
AU	4.118	4.138		4.135	4.135				
AV									
AW									
			Accept/Reject						

Measured by:	S.G
Date:	05/05/19

Audited by	EP
Date:	05/05/19

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	RF

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Apr 12, 2005
02:25 pm

Work Order No : 0023058
Project Name : D2940-1
Project For : WK519
Work Order Type : Main
Main WO Number :
House Part Number : D2940-1
Description : Support
Manufactured : Yes
Amount Req'd : 10
Amount Done : 0
Start Date : 04-12-05
Est Finish Date : 05-05-05
Act Finish Date :
Drawings Reqd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00

Order Entry No :
OE Value : 0.00

Est Mark Up : 0.000%
Actual Mark Up : 0.000%

$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00

CB7834

GLORIA MATERIAL TECHNOLOGY CORP.

台南縣新營市新中路35號1樓
1FL ,NO.35,HSIN CHUNG RD ,HSIN YING,
TAINAN,TAIWAN,ROC

TEL: (06)6520000
FAX: (06)6520088

INSPECTION CERTIFICATE

Messrs: PROGRESSIVE ALLOY STEEL UNLIMITED L.L.C.

Order No: 2004003262 Grade: 17-4PH P.O.NO.: 3370

FILE NO: 2004004782-A Size: 4-1/2" Date: 11/30/2004

HEAT-Lot No: S2301-40 Weight: 1026.0KG P'cs: 3

Condition: HF-Solution Annealed-Peeled

Chemical Composition (wt%)

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Nb+Ta
Min.					0.015	3.00	15.00		3.00	0.15
Max.	0.07	1.00	1.00	0.040	0.030	5.00	17.50	0.50	5.00	
Result	0.03	0.36	0.64	0.021	0.023	4.48	15.79	0.13	3.25	

Mechanical Properties	Spec. Hardness(1/2R)	Grain Size	δ-Ferrite	H900-Hardness(Avg)
Spec.Min.				40HRC
Spec.Max.	363HB		5%	47HRC
Result	333HB	7.5	0.64%	45.1HRC

Tensile Test

	Elongation(A) %	Tensile Strength(Rm) KSI	Yield Strength(Rp) KSI	Reduction of Area(Z) %
Unit				
Min.	10	190	170	40
Max.		210	184	53
Result	20			

Non-Metallic Inclusions :(AMS 2303C)

	Severity	Frequency
Max.	0.35	0.4
Result	0	0

Specification:
1.ASTM A484M-03a, A564M-04, A370-03a.
2.ASME SA484 (1998), SA564 (1998).
3.AMS 5643Q, 2303C(Magnetic Particle Test).
4.EN 10204/3.1.B.
5.UNS S17400.
6.SAE AMS-H-6875.

Remark:

Hsin-Jung Huang
QA SECTION

ISO 9001

Our quality and environment management system have been certified by ISO9001 QMS and 14001EMS
We hereby certify that the material described herein has been manufactured and tested with satisfactory result in accordance with the requirement of the above material specification We hereby inspection Certificate comply with EN10204 3.1.B.

GLORIA MATERIAL TECHNOLOGY CORP.

台南縣新營市新中路35號1樓
1FL.,NO 35,HSIN CHUNG RD .HSIN YING,
TAINAN,TAIWAN,ROC

TEL: (06)6520000
FAX: (06)6520088

INSPECTION CERTIFICATE

Messrs: PROGRESSIVE ALLOY STEEL UNLIMITED L.L.C.

TLE NO: 2004004782-A	Size: 4-1/2"	Date:	11/30/2004
Order No: 2004003262	Grade: 17-4PH	P.O.NO.:	3370
HEAT-Lot No: S2301-40	Weight: 1026.0KG	P'cs:	3

Condition: HF-Solution Annealed-Peeled

1.MANUFACTURING PROCESS:EAF+LHF+VOD, FORGED OR HOT ROLLED.
2.SOLUTION TREATMENT: 1900F FOR 30 MIN/INCH PLUS ONE ADDITIONAL HOUR (MINIMUM ONE HOUR),RAPIDLY COOLED TO BELOW 90F.
3.MATERIAL IS FREE FROM KNOWN CONTACT WITH MERCURY AND RAIUM.
4.MATERIAL IS FREE FROM WELDS OR WELD REPAIRS.
5.ULTRASONIC TEST:OK.
6.MACRO/MICRO OK.
7.MECHANICAL PROPERTIES TESTED AS PER H900 CONDITION.
8.REDUCTION RATION 4:1 MIN
9.FURNACES CALIBRATED TO MIL-H-6875.

Hsin-Jung Huang
QA SECTION

ISO 9001

Our quality and environment management system have been certified by ISO9001 QMS and 14001EMS.
We hereby certify that the material described herein has been manufactured and tested with satisfactory result in accordance with the requirement of the above material specification We hereby Inspection Certificate comply with EN10204 3.1 B.